

## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Mandelkow, Eva-Maria  
Mandelkow, Eckhard  
Lichtenberg-Kraag, Birgit  
Biernat, Jacek  
Drewes, Gerard  
Steiner, Barbara
- (ii) TITLE OF INVENTION: Novel Tools For The Diagnosis And  
Treatment Of Alzheimer's Disease
- (iii) NUMBER OF SEQUENCES: 1
- (iv) CORRESPONDENCE ADDRESS:  
(A) ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  
(B) STREET: 233 South Wacker Drive, 6300 Sears Tower  
(C) CITY: Chicago  
(D) STATE: Illinois  
(E) COUNTRY: United States of America  
(F) ZIP: 60606-6402
- (v) COMPUTER READABLE FORM:  
(A) MEDIUM TYPE: Tape  
(B) COMPUTER: IBM PC compatible  
(C) OPERATING SYSTEM: PC-DOS/MS-DOS  
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:  
(A) APPLICATION NUMBER: 08/477,648  
(B) FILING DATE: June 7, 1995  
(C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:  
(A) NAME: Joseph A. Williams, Jr.  
(B) REGISTRATION NUMBER: 38,659  
(C) REFERENCE/DOCKET NUMBER: 28384/32777
- (ix) TELECOMMUNICATION INFORMATION:  
(A) TELEPHONE: 312-474-6300  
(B) TELEFAX: 312-484-0448  
(C) TELEX: 25-3856

## (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 441 amino acids  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Glu | Pro | Arg | Gln | Glu | Phe | Glu | Val | Met | Glu | Asp | His | Ala | Gly |
| 1   |     |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Tyr | Gly | Leu | Gly | Asp | Arg | Lys | Asp | Gln | Gly | Gly | Tyr | Thr | Met | His |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

Gln Asp Gln Glu Gly Asp Thr Asp Ala Gly Leu Lys Glu Ser Pro Leu  
 35 40 45  
 Gln Thr Pro Thr Glu Asp Gly Ser Glu Glu Pro Gly Ser Glu Thr Ser  
 50 55 60  
 Asp Ala Lys Ser Thr Pro Thr Ala Glu Asp Val Thr Ala Pro Leu Val  
 65 70 75 80  
 Asp Glu Gly Ala Pro Gly Lys Gln Ala Ala Ala Gln Pro His Thr Glu  
 85 90 95  
 Ile Pro Glu Gly Thr Thr Ala Glu Glu Ala Gly Ile Gly Asp Thr Pro  
 100 105 110  
 Ser Leu Glu Asp Glu Ala Ala Gly His Val Thr Gln Ala Arg Met Val  
 115 120 125  
 Ser Lys Ser Lys Asp Gly Thr Gly Ser Asp Asp Lys Lys Ala Lys Gly  
 130 135 140  
 Ala Asp Gly Lys Thr Lys Ile Ala Thr Pro Arg Gly Ala Ala Pro Pro  
 145 150 155 160  
 Gly Gln Lys Gly Gln Ala Asn Ala Thr Arg Ile Pro Ala Lys Thr Pro  
 165 170 175  
 Pro Ala Pro Lys Thr Pro Pro Ser Ser Gly Glu Pro Pro Lys Ser Gly  
 180 185 190  
 Asp Arg Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser  
 195 200 205  
 Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr Arg Glu Pro Lys  
 210 215 220  
 Lys Val Ala Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala Lys  
 225 230 235 240  
 Ser Arg Leu Gln Thr Ala Pro Val Pro Met Pro Asp Leu Lys Asn Val  
 245 250 255  
 Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly Gly  
 260 265 270  
 Gly Lys Val Gln Ile Ile Asn Lys Lys Leu Asp Ile Ser Asn Val Gln  
 275 280 285  
 Ser Lys Cys Gly Ser Lys Asp Asn Ile Lys His Val Pro Gly Gly Gly  
 290 295 300  
 Ser Val Gln Ile Val Tyr Lys Pro Val Asp Leu Ser Lys Val Thr Ser  
 305 310 315 320  
 Lys Cys Gly Ser Leu Gly Asn Ile His His Lys Pro Gly Gly Gly Gln  
 325 330 335  
 Val Glu Val Lys Ser Glu Lys Leu Asp Phe Lys Asp Arg Val Gln Ser  
 340 345 350  
 Lys Ile Gly Ser Leu Asp Asn Ile Thr His Val Pro Gly Gly Gly Asn  
 355 360 365  
 Lys Lys Ile Glu Thr His Lys Leu Thr Phe Arg Glu Asn Ala Lys Ala  
 370 375 380

*Antidote*

Lys Thr Asp His Gly Ala Glu Ile Val Tyr Lys Ser Pro Val Val Ser  
385 390 395 400

Gly Asp Thr Ser Pro Arg His Leu Ser Asn Val Ser Ser Thr Gly Ser  
405 410 415

Ile Asp Met Val Asp Ser Pro Gln Leu Ala Thr Leu Ala Asp Glu Val  
420 425 430

Ser Ala Ser Leu Ala Lys Gln Gly Leu  
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